THE EDINBURGH STEREOSCOPIC ATLAS OF OBSTETRICS

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In Four Sections, each containing Twenty-five Subjects, with Descriptive Text

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26. SCOLIO-RACHITIC PELVIS.

This deformity, usually rachitic in origin, is produced by Spinal Scoliosis or Lateral Curvature of the Spine.

The Brim presents the usual features of the Rickety Flat Pelvis, but the Scoliosis produces this further deformity that the Sacral Promontory deviates towards one side. In this case it has become approximated to the left Acetabulum, so that the left Sacro-cotyloid Diameter is shorter than the right.

The flattening or flaring of the Iliac Fossæ is in this specimen so exaggerated that the Interspinous Diameter far exceeds the Intercristal Diameter.

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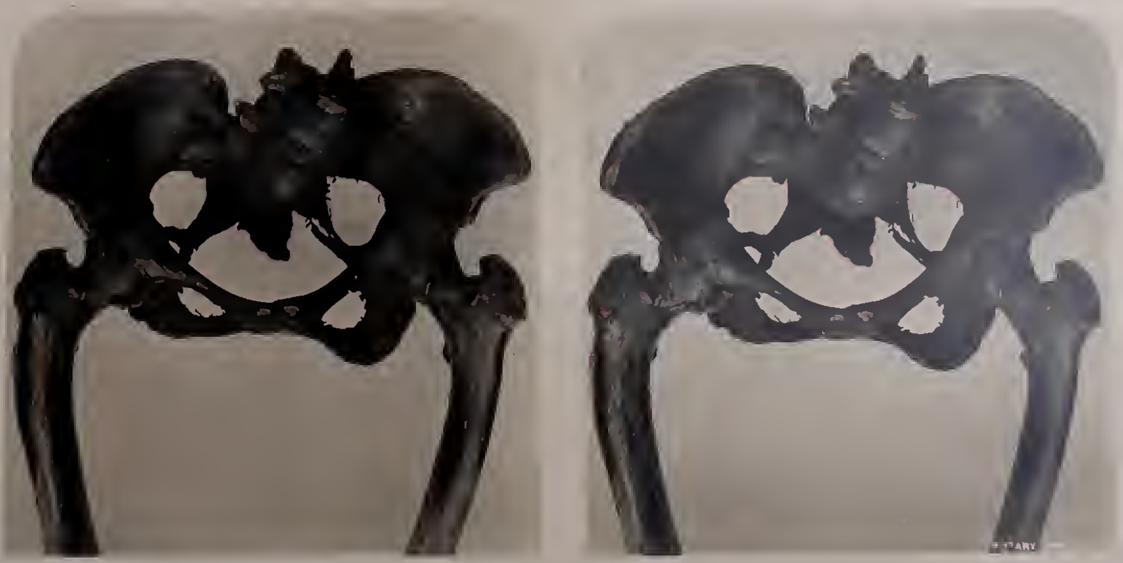

27. PELVIS OF ACROMEGALIC GIGANT.

(By kind permission of Dr A. Campbell Geddes.)

The patient from whom this Pelvis was obtained died at the age of fifty, having been the subject of Acromegaly for twenty-five years. The internal generative organs were hypoplastic and only once during these twenty-five years had the patient any indication of catamenial flow

The Pelvis is remarkable for its extraordinary breadth, for the flatness of its Pubic Arch and large size of the Obturator Foramina.

The breadth of the Pelvis is chiefly due to abnormal growth of the innominate bones i the regions of the Sacro-iliac joints and Pubic Symphysis.

The transverse widening and antero-posterior narrowing give it something of the feature of a Rickety Pelvis. Although the Promontory projects and the body of the Sacrum is mor horizontal than usual, the perpendicular curve is fairly well maintained.

Measurements of False Pelvis—

Intercristal Diameter - - -	12 inches.
Interspinous Diameter - - -	11 "

Measurements of Pelvic Inlet—

Antero-posterior Diameter - -	3½ inches.
Transverse Diameter - - -	6½ "
Right Oblique Diameter - -	6 "
Left Oblique Diameter - - -	6¼ "

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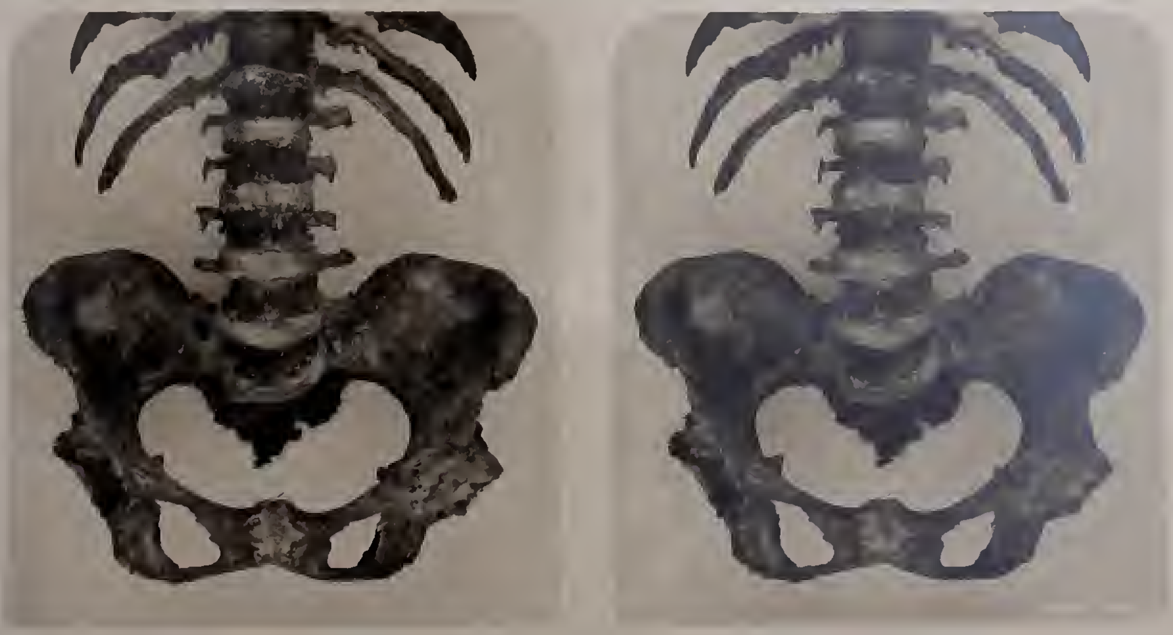

28. PELVIS OF ACROMEGALIC GIGANT.

View of Pelvic Outlet.

The strongly marked inwardly projecting ridge formed by the overgrowth of bone in the region of the Pubic Symphysis, the distortion of the Ilia due to growth in the neighbourhood of the Sacro-iliac joints, and the backward set of the Sacrum are the points of special interest brought out in this view.

The antero-posterior diameter of the Outlet measures 5 inches, and the transverse diameter 5½ inches.

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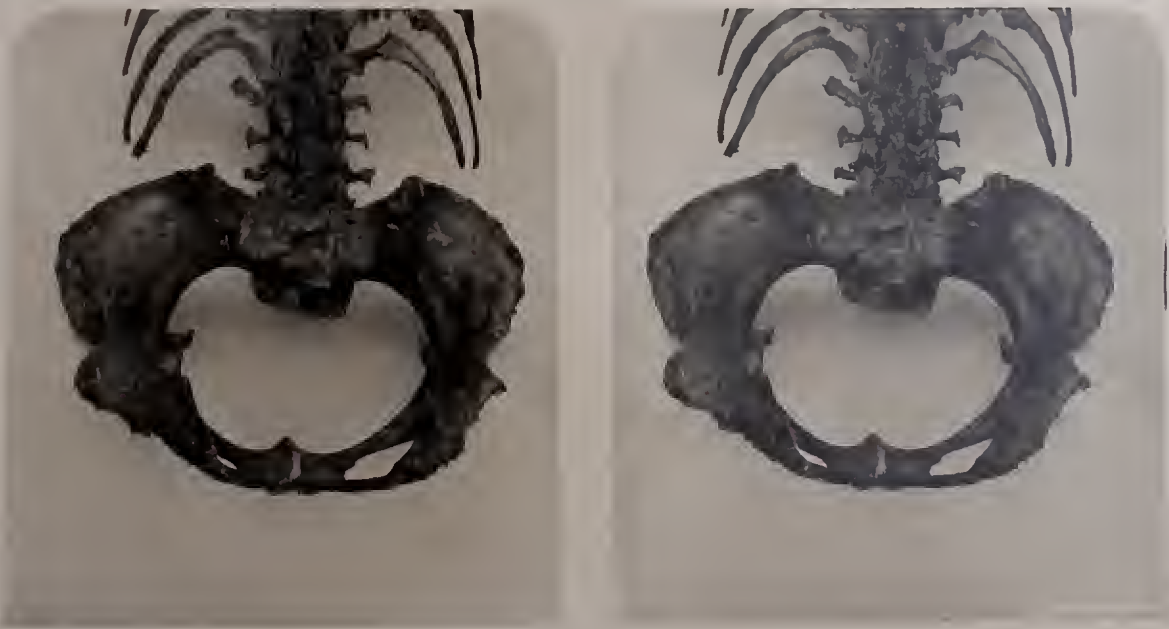

29. CALLIPERS (3 Varieties).

1. Martin's. 2. Baudelocque's. 3. Budin's.

This instrument is employed in ascertaining certain external measurements of the Pelvis, viz., the Interspinous, Intercristal, Intertrochanteric, and External Conjugate.

In measuring the Interspinous Diameter, for example, the knob at each end of the bent arm of the instrument is held between the thumb and index finger of the right and left hand respectively, and placed on the anterior superior Iliac Spine on either side of the Pelvis, when the distance between the knobs is recognised in inches or centimetres, registered on a scale at the other end of the instrument. The Intercristal Diameter is obtained by applying the knobs to the most distant points on the outer margin of the Iliac Crest on each side.

The External Conjugate or Baudelocque Diameter is obtained by placing the knob of the left branch on a depression corresponding to the Spine of the last Lumbar Vertebra, and then moving the knob of the right branch over the Mons Veneris to the upper part of the Symphysis Pubis. When the operator is satisfied that he has got the instrument accurately in position, the scale is then read off. It should not be less than 7½ inches. The relation of the External Conjugate to the Conjugata Vera is 7½ to 4 inches on an average.

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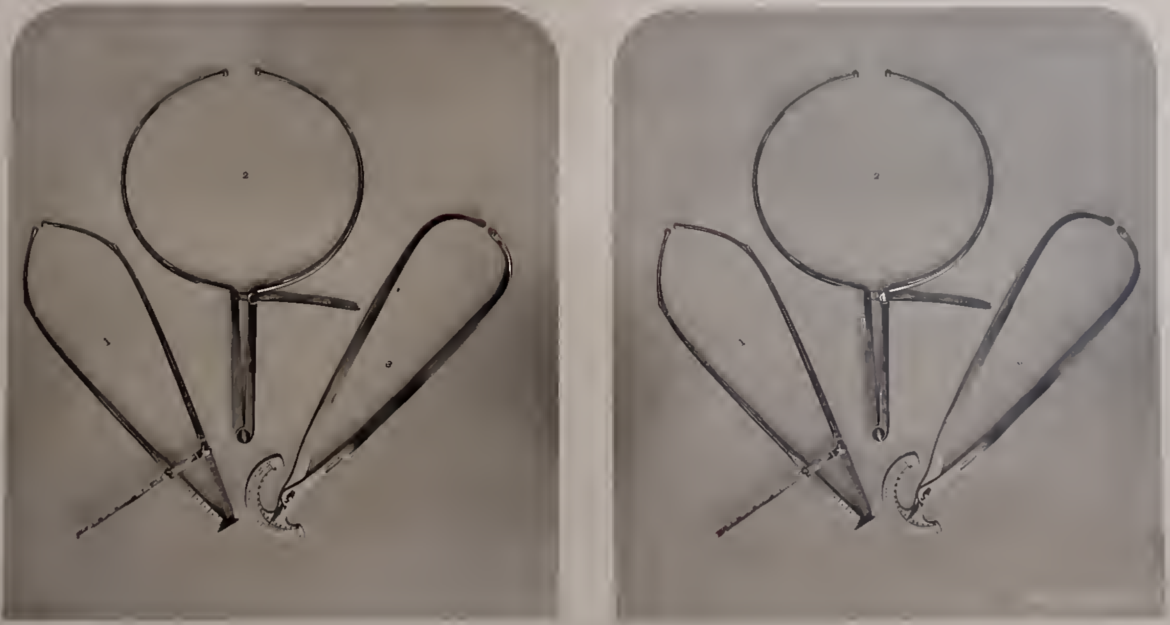

30. NORMAL FEMALE PELVIS.

Method of Measuring Diagonal Conjugate.

The index and medius fingers of the left hand are introduced so that the medius touches the projecting promontory of the Sacrum at its centre. The index finger of the right hand marks a point on the left index finger corresponding to the lower margin of the Symphysis Pubis. The distance from this point to the tip of the medius finger is then measured, and an approximate idea of the Conjugate Diameter is by this means ascertained.

The Diagonal Conjugate or Promonto-subpubic Diameter is at least half-an-inch longer than the True Conjugate or Promonto-suprapubic Diameter. In some rickety Pelves with deep Symphysis and everted lower margin the difference may even be one inch.

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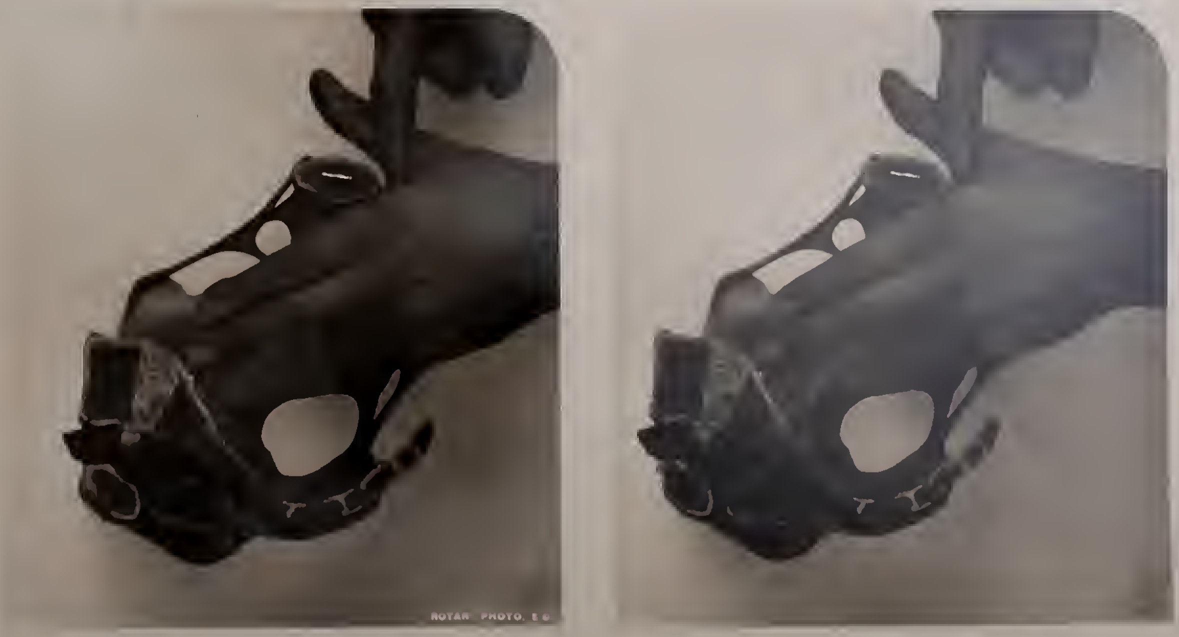

31. EXTERNAL GENITAL ORGANS OF MULTIPARA AT EIGHTH MONTH OF PREGNANCY.

The **Mons Veneris** is the cushion-like body of adipose tissue resting upon the anterior and upper surface of the Symphysis Pubis. After puberty it is covered with crisp hair in the form of a triangle, with the base at the transverse skin furrow in the lower part of the abdomen.

The **Labia Majora** are the two thick folds of skin extending downwards and backwards on either side of the Vulva, and covered with hair on their external aspect. In children and virginal adults they usually lie in close apposition, but in multiparous women they often gape widely. They are directly continuous at their commissure with the Mons Veneris above and with the Perineum below, the fourchette of the Perineum being usually formed by the bridge of skin running between the posterior extremities of the two Labia. The inner aspect is moist, resembling a mucous surface, is never covered with hair, but supplied with sebaceous glands. Under the skin lies a large plexus of veins, the rupture of which by external violence or injury during labour may give rise to the formation of a Hæmatoma.

Internal to the Labia Majora are the **Labia Minora** or Nymphæ—two hairless folds of skin which meet about an inch below the commissure anteriorly in the middle line to form the Prepuce of the Clitoris. Posteriorly they pass almost imperceptibly into the Labia Majora, or, as in the instance here depicted, they fuse together in the middle line to form the Perineal Fourchette. In multiparous women they become exposed in consequence of the gaping condition of the Labia Majora, as shown in the Stereogram. In nulliparæ they are ordinarily covered by the closely apposed External Labia, except in cases of unusual length of the structures, the so-called Hottentot Nymphæ.

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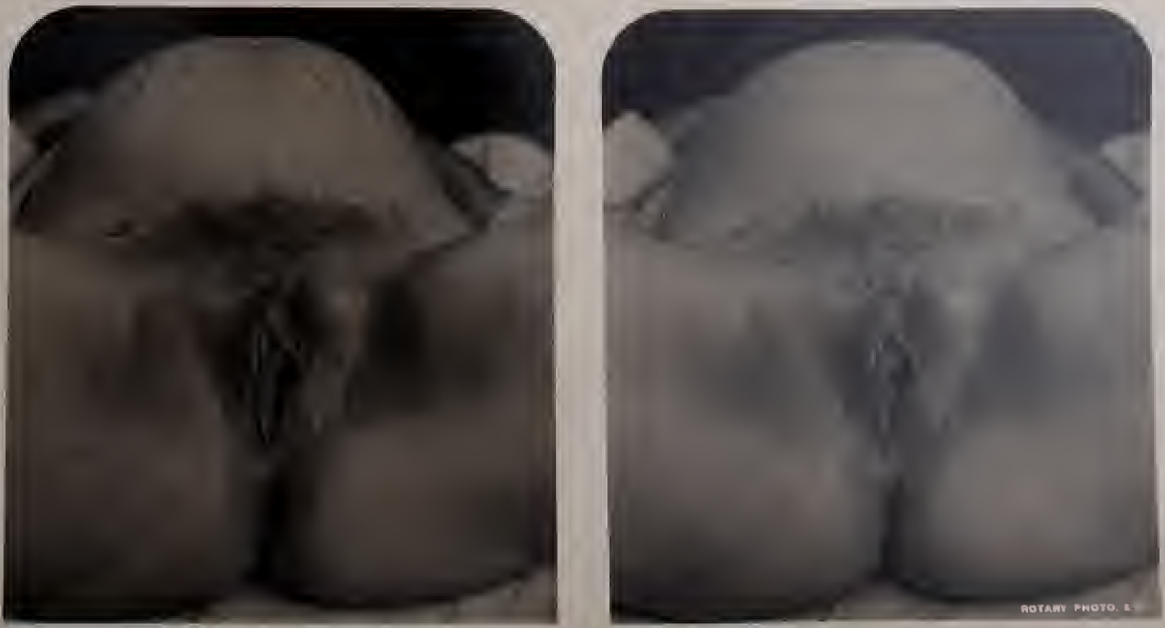

32. EXTERNAL GENITAL ORGANS OF NULLIPARA WITH HYMEN INTACT.

(By kind permission of Professor Harvey Littlejohn.)

The **Clitoris** is an erectile organ situated at the anterior portion of the Vulva, and is described in Stereogram 33.

The **Vestibule** is a triangular area of mucous membrane which is bounded laterally by the Labia Minora, the Clitoris constituting the apex, and the anterior margin of the Vaginal Orifice its base. In the centre of the base is the **External Urethral Orifice** (1), which in the accompanying view has been artificially dilated and the specimen hardened in formalin. The **Vaginal Orifice** lies further back below the Orifice of the Urethra. In the virgin this opening is more or less closed by a fold of mucous membrane—the **Hymen**. When the Hymen is intact the opening is small, having in most cases the appearance of a vertical slit. It is well seen only when the membrane is put on the stretch, when the aperture may be seen to be crescentic, opening anteriorly. Sometimes it is circular. The Hymen may be cribriform. An imperforate Hymen is likely to lead to trouble after menstruation has set in, because of retention of the menstrual fluid.

The Hymen is generally ruptured at the first coitus, and at parturition becomes still more broken up, and reduced to irregular projections of the mucous membrane—the **Carunculæ Myrtiformes**.

Between the posterior margin of the Vaginal Orifice and the Fourchette is a small boat-like depression, known as the **Fossa Navicularis**.

Figure 1 indicates the artificially dilated External Orifice of the Meatus Urinarius, immediately below it is the Hymeneal Aperture or Introitus Vaginæ. In this case the Orifice is circular, and has also been dilated.

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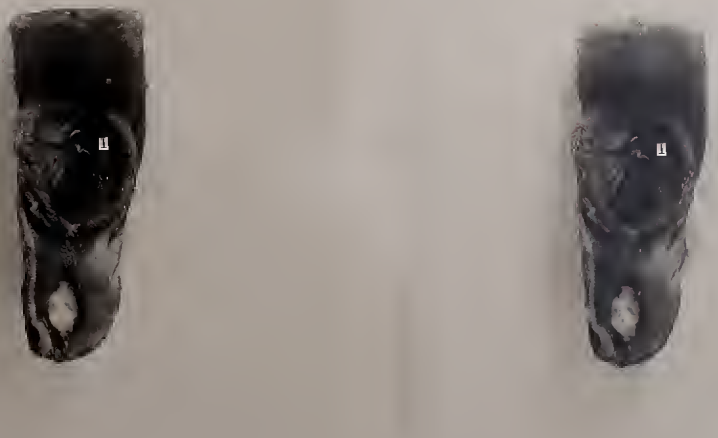


33. FEMALE PERINEUM.

The superficial structures have been removed down to the level of the Triangular Ligament, leaving the Clitoris and the Vestibular Bulb and the Crus Clitoridis on the right side. The Ischio-rectal Fossa has been cleared out, and the Levator Ani exposed.

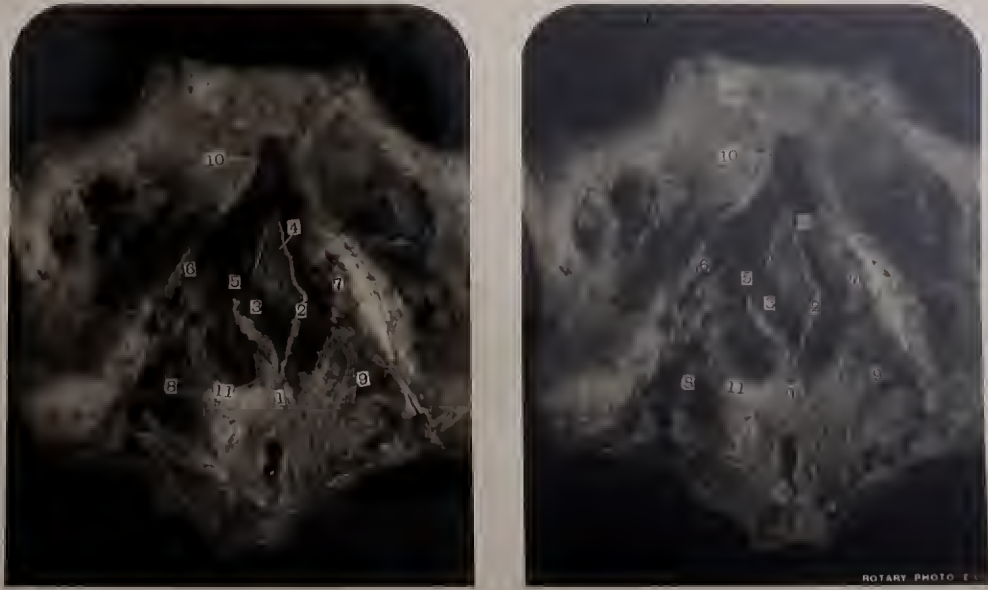
The **Clitoris** is the morphological equivalent of the Penis in the male, and is composed of a body and two crura. The body of the Clitoris is about 1 to 1½ inches in length, and is bent upon itself. It tapers towards its extremity, which is constituted by the Glans Clitoridis, a small mass of spongy erectile tissue covered by sensitive epithelium. The Prepuce or fold of skin which covers it, and the Frenulum which is attached to it inferiorly, are continuous with the Labia Minora. The two Crura Clitoridis diverge from the body posteriorly, and are attached to the sides of the Pubic Arch.

Lying beneath the mucous membrane of the Vestibule on either side are the Vestibular Bulbs (5) which are two oval masses of erectile tissue composed of minute convoluted blood-vessels held together by connective tissue. During parturition they are usually pushed up beneath the Pubic Arch, but their posterior ends are liable to injury, their rupture giving rise to a Hæmatoma of the Vulva, or to profuse External Hæmorrhage.

The figures indicate :—

1. Central Point of Perineum above the Anal Aperture.
2. Margin of Vaginal Orifice.
3. Caruncula Myrtiformis.
4. Meatus Urinarius.
5. Bulb of Vestibule,
6. Crus Clitoridis.
7. Triangular Ligament.
8. Superficial Perineal Vessel (divided).
9. Levator Ani Muscle.
10. Clitoris.
11. Sphincter Vaginæ (divided).

33



34. FEMALE PERINEUM.

The superficial layer of the Triangular Ligament, and all the structures superficial to it, have been removed.

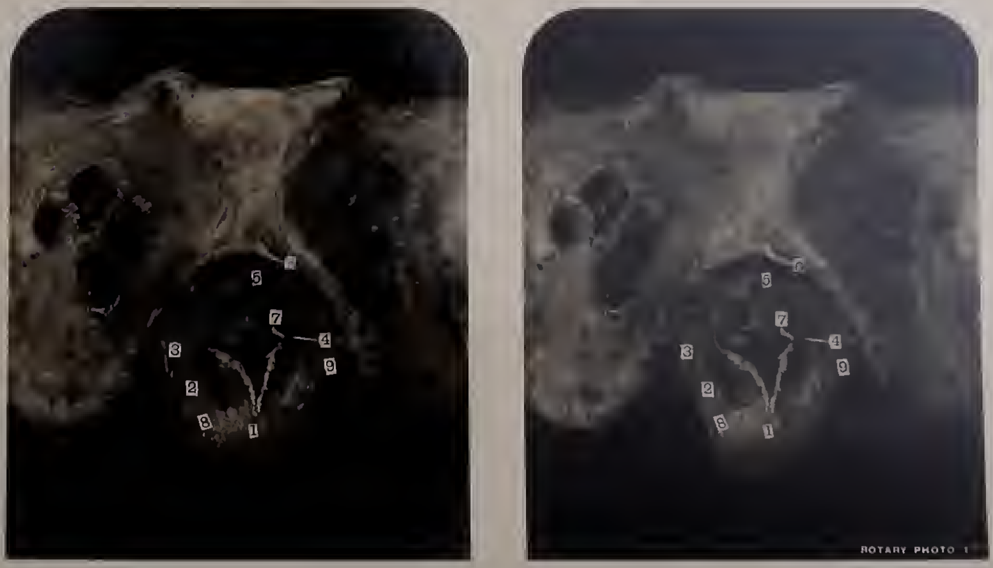
The deep Transversus Perinei Muscle arises from the inner aspect of the Pubic Arch, and spreads out upon the surface of the Urethra in front, and the Vagina behind. On the right side the Muscle has been taken away to show the Levator Ani Muscle, the vaginal fibres of which (3) support the Vagina at the sides.

The dorsal nerve of the Clitoris is shown emerging on the left side (6), the accompanying vessels having been removed. Immediately behind the lower part of the Symphysis Pubis a large Venous Plexus surrounds the upper part of the Urethra, and rests upon the anterior part of the Levator Ani.

The figures indicate:—

1. Central Point of Perineum.
2. Anal Fibres of Levator Ani Muscle.
3. Vaginal Fibres of Levator Ani Muscle.
4. Deep Transversus Perinei Muscle.
5. Mass of Vascular Tissue.
6. Dorsal Nerve of Clitoris.
7. Meatus Urinarius.
8. Veins of Posterior Vaginal Plexus.
9. Dorsal Artery of Clitoris (divided).

34



35. FEMALE PERINEUM.

The relation of the deeper parts to the Pubic Arch and Symphysis is shown.

The Bladder (1) lies at a somewhat lower level in the Female Pelvis than in the Male, the neck being just below the lower margin of the Symphysis Pubis.

The position of the Pubo-vesical Ligament and the Venous Plexus shown at 3 is of importance in view of the operation of Symphysiotomy.

Alcock's Canal, containing the Internal Pudic Artery, the Pudic Veins, and the terminal parts of the Pudic Nerve (viz., the Dorsal Nerve of the Clitoris and the Perineal Division), is shown at 7.

The figures indicate:—

1. Urinary Bladder.
2. Levator Ani Muscle.
3. Pubo-vesical Ligament and Veins.
4. Urethra.
5. Anal Fibres of Levator Ani Muscle.
6. Central Point of Perineum.
7. Alcock's Canal with Pudic Vessels.

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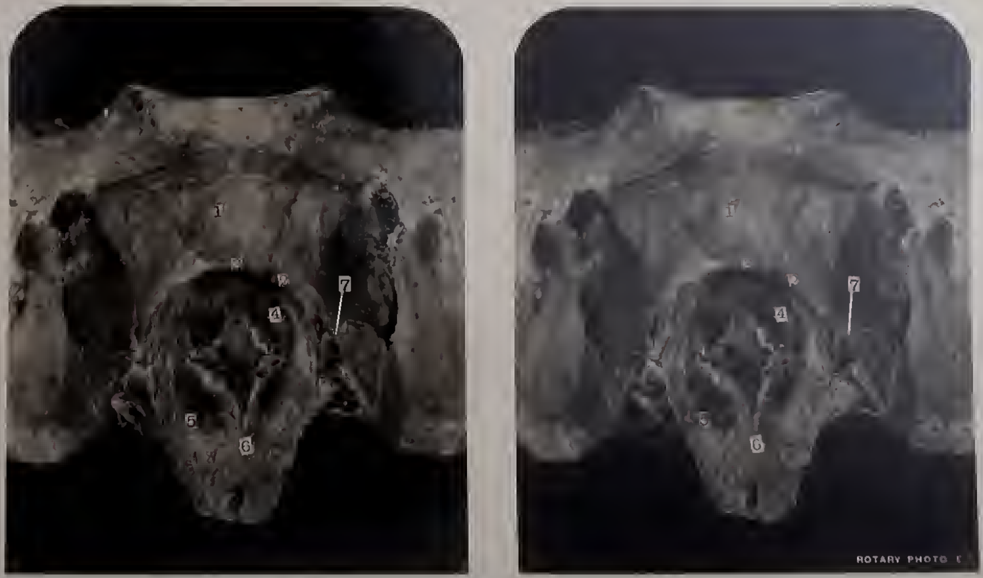


36. INTERIOR OF PELVIS.

The Anterior Wall of the Pelvis has been removed. The Peritoneum has been divided at the root of the Broad Ligament and stripped from the Bladder.

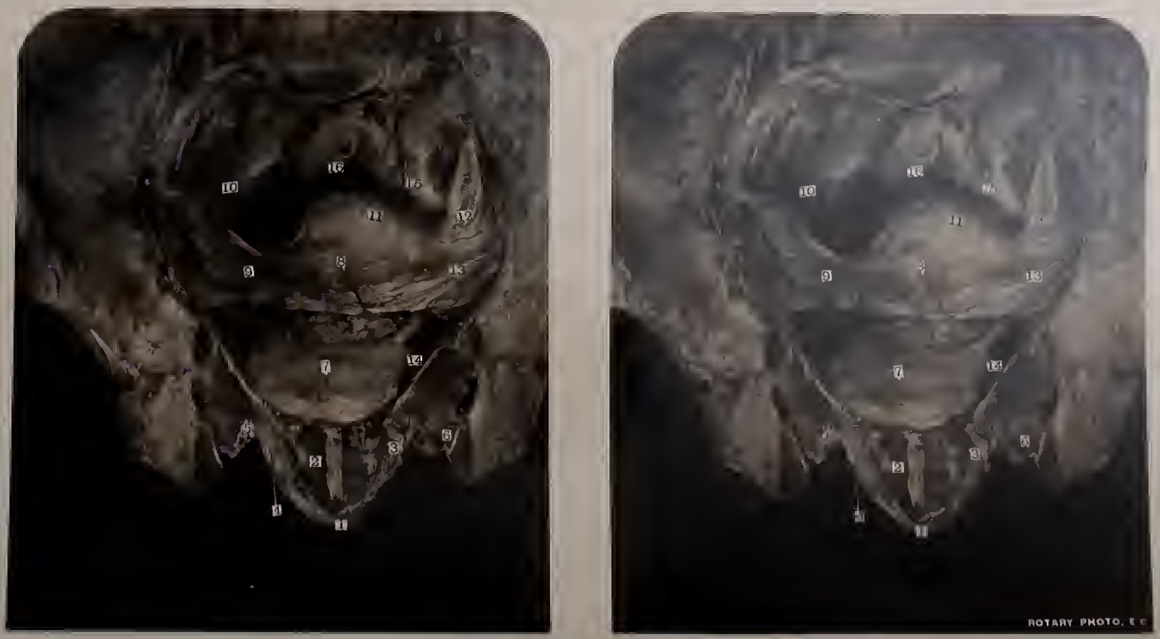
The Urethra has been dissected out of the Anterior Vaginal Wall (2). Its length is about $1\frac{1}{2}$ inches, and it is nearly straight in its course from the neck of the Bladder to the External Orifice (1). The posterior aspect of the Bladder is in relation to the front of the Vagina and the upper two-thirds of the Cervix Uteri.

The folds of Peritoneum which invest the anterior and posterior surfaces of the Uterus pass outwards on either side to form the Broad Ligament, that portion of the anterior surface of the Cervix Uteri associated with the posterior aspect of the Bladder not being in relation to the Peritoneum. It is seen partly exposed in the space between 7 and 8.

The figures indicate:—

1. Meatus Urinarius.
2. Vaginal Wall, containing the Urethra.
3. Vaginal Venous Plexus.
4. Levator Ani Muscle.
5. Pelvic Fascia.
6. Obturator Internus.
7. Upper Surface of Bladder.
8. Reflection of Peritoneum from Uterus.
9. Right Broad Ligament.
10. Right Fallopian Tube.
11. Body of Uterus.
12. Left Fallopian Tube.
13. Left Round Ligament.
14. Left Ureter.
15. Sigmoid Flexure of the Colon.
16. Beginning of Rectum.

36



37. INTERIOR OF PELVIS.

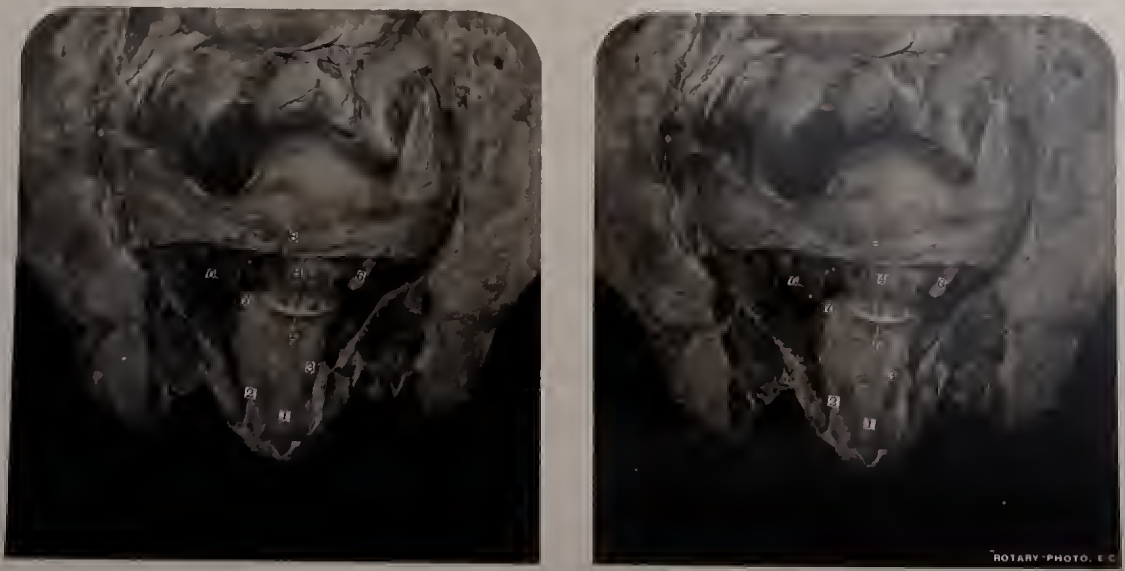
The Ureters have been divided, the Bladder removed, and the Anterior Wall of the Vagina taken away, as well as the Anterior Pelvic Wall.

The lateral aspect of the Vagina is enclosed in a large mass of highly vascular tissue, forming a large Venous Plexus on either side (3). The Posterior Vaginal Wall (1) is normally in contact with the anterior. The Cervix of the Uterus is invaginated into the upper end or vault of the Vagina, and the Vaginal Vault or **Fornix** is, for convenience of description, subdivided into the anterior, posterior, and two lateral fornices.

The figures indicate:—

1. Posterior Vaginal Wall.
2. Cut Margin of Wall.
3. Vaginal Venous Plexus.
4. Cervix Uteri.
5. Os Uteri with attachment of Uterus to Vagina seen at the Sides.
6. Ureters.
7. Uterine Venous Plexus.
8. Reflection of Peritoneum from Uterus at Back of Utero-vesical Pouch.

37



38. INTERIOR OF PELVIS.

The anterior wall of the Pelvis as also the Bladder, the anterior wall of the Vagina, and the anterior layer of the Broad Ligament have been removed.

The Uterine Artery has been traced in its course along the base of the Broad Ligament, and the contents of the latter are exposed.

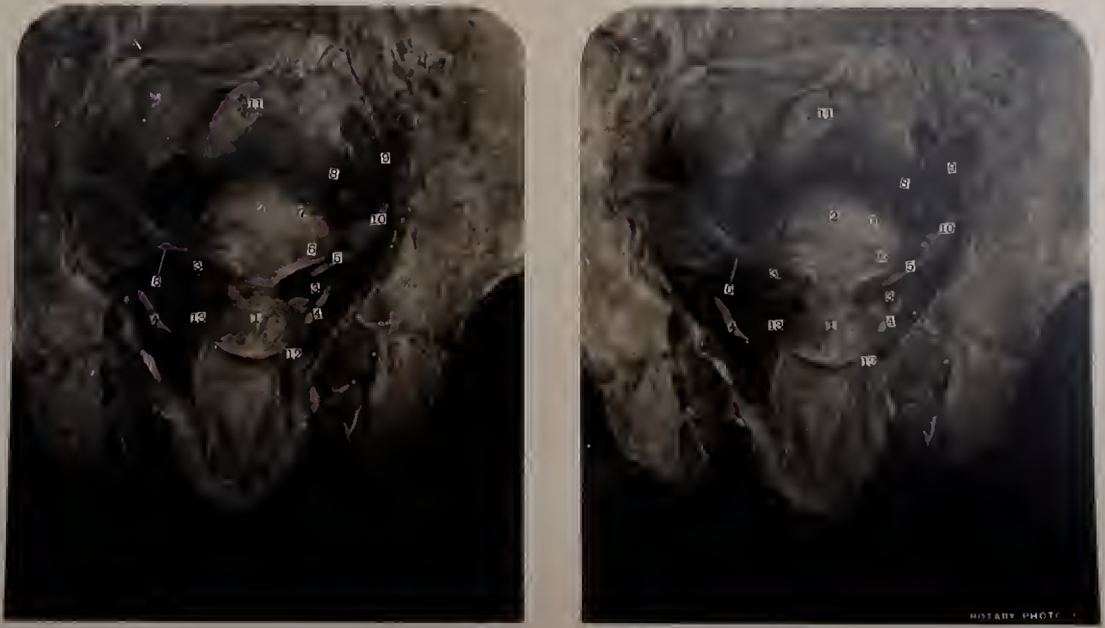
The vessels contained in the Broad Ligament include the Uterine (3) and Ovarian Arteries and Veins. The Veins form a large Plexus at the border of the Uterus from which blood passes by the Uterine Vein (5) to the Internal Iliac Vein, and also a Plexus near the Ovary from which two Ovarian Veins pass (7) with the Ovarian Artery—the Veins on the right side ending in the Inferior Vena Cava, and on the left in the Left Renal Vein.

The external characters of the Uterus are well represented.

The figures indicate:—

1. Cervix Uteri.
2. Corpus Uteri.
3, 3. Uterine Arteries.
4. Ureter.
5. Left Uterine Vein.
6, 6. Round Ligaments.
7. Left Ovarian Veins.
8. Left Fallopian Tube.
9. Ovarian Venous Plexus.
10. Left Ovary.
11. Rectum.
12. Cervical Venous Plexus.
13. Uterine Artery, Vaginal Branch.

38



39. PELVIC CONTENTS FROM BEHIND.

The Rectum has been exposed from behind, and shown in relation to the lower part of the Sacrum and Coccyx.

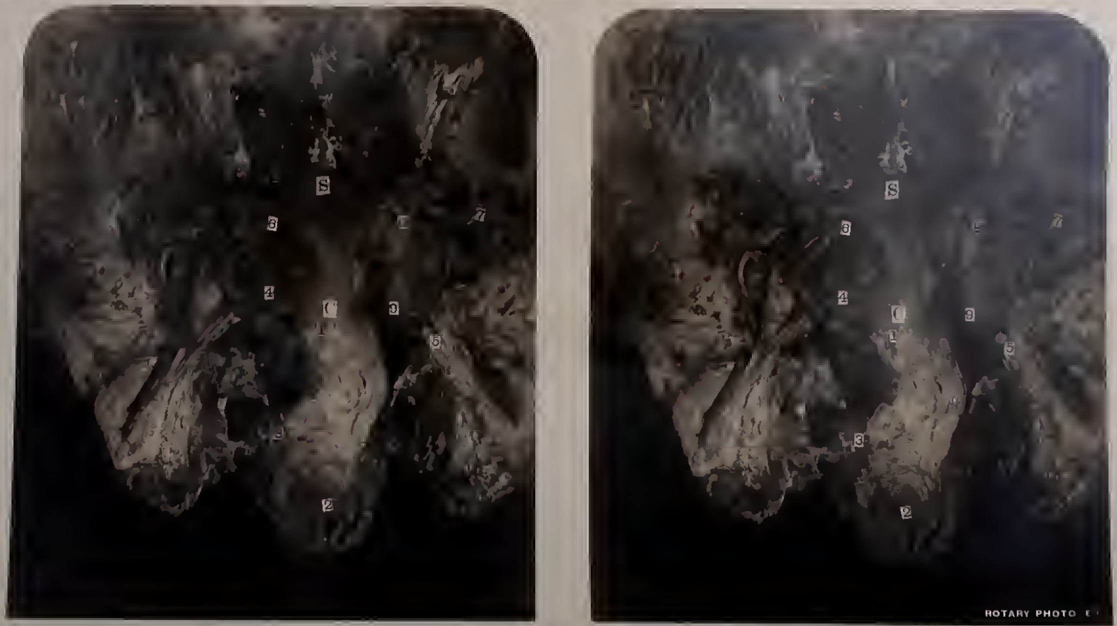
The Angle between the Anal Canal and the lower part of the Rectum is well shown. On each side of the Rectum the posterior aspect of the Peritoneum (4), forming the Pouch of Douglas, is seen.

The figures indicate:—

1. Rectum.
2. Anus.
3. Levator Ani Muscle.
4. Peritoneum.
5. Great Sacro-sciatic Ligament.
6. Superior Hæmorrhoidal Vessels.
7. Ureter.
8. Sacral Nerve.
9. Rectal Fascia.

S. Sacrum.
C. Coccyx.

39



40. PELVIC CONTENTS FROM BEHIND.

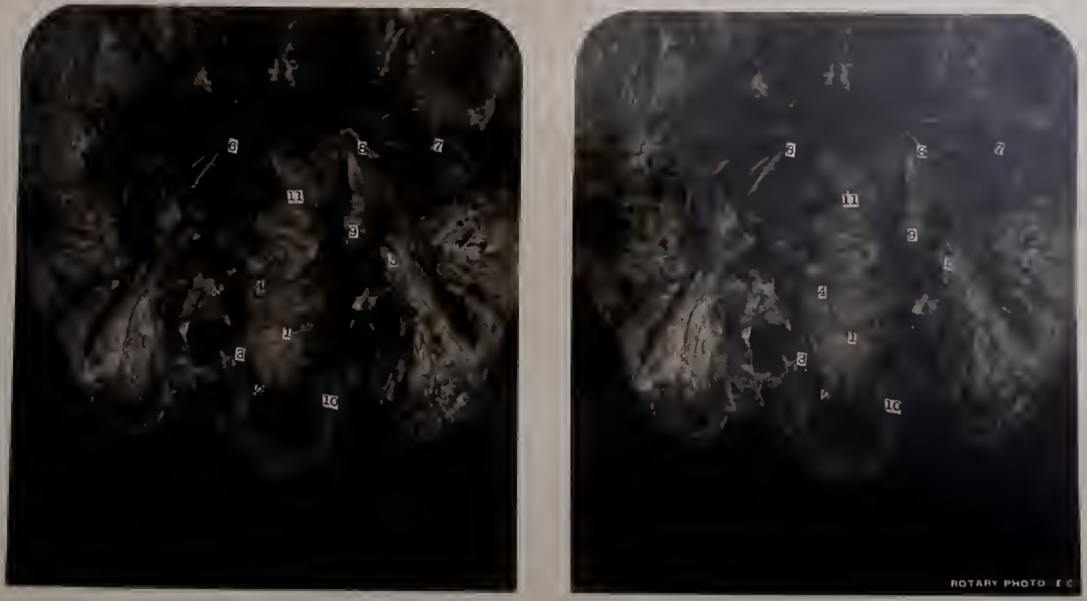
The Back Wall of the Pelvis has been removed from the 2nd Sacral Vertebra downward.

The Rectum has been divided about its middle and the lower part removed, the Anal Canal having been shelled out from the Levator Ani Muscles. The reflection of the Peritoneum (Pouch of Douglas) on to the Posterior Wall of the Vagina (4) is approximately at the level of the Ischial Spines. Between the Rectum and the Vagina is a large Venous Plexus (2) most pronounced at the sides.

The figures indicate:—

1. Posterior Wall of Vagina.
2. Vaginal Venous Plexus.
3. Levator Ani Muscle.
4. Peritoneal Reflection on to Posterior Vaginal Wall.
5. Great Sacro-sciatic Ligament.
6. Superior Hæmorrhoidal Vessels.
7. Ureters.
8. Third Sacral Nerve.
9. Rectal Fascia.
10. External Sphincter Ani.
11. Rectum Divided.

40



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41. PELVIC BRIM AND CAVITY.

The Broad Ligament with its contents divides the Pelvic Peritoneal Cavity into an anterior and a posterior compartment, the former being the **Utero-vesical** Pouch, and the latter the **Recto-vaginal**, or Pouch of Douglas. The left part of the Pouch of Douglas is here filled with the Sigmoid Flexure of the Colon.

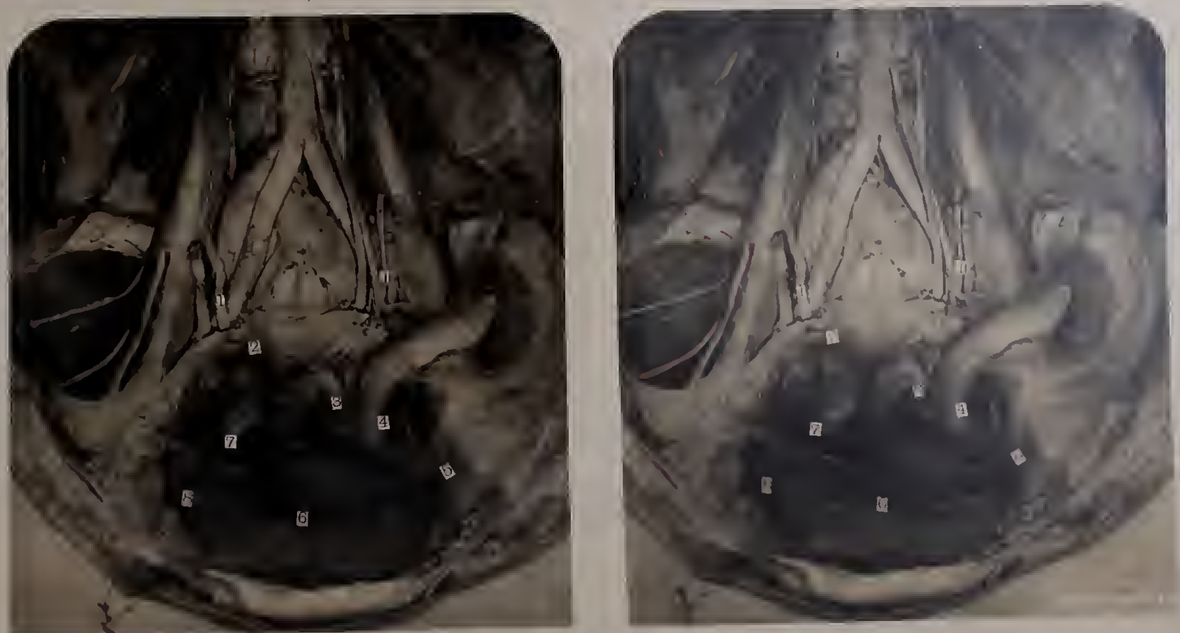
On either side of the Promontory of the Sacrum lie the Common Iliac Vessels, and crossing them the Ureters (1) and the Ovarian Vessels, the Psoas Muscles being to their outer side.

The bifurcation of the Abdominal Aorta to form the Common Iliac Arteries takes place opposite the middle of the body of the fourth Lumbar Vertebra, a little to the left of the middle line. The position of the Abdominal Aorta should be noticed in connection with compression for post-partum hæmorrhage as advocated by some writers.

The figures indicate:—

1. Ureters.
2. Utero-sacral Ligament.
3. Fundus Uteri.
4. Sigmoid Flexure of Colon.
5. Round Ligament of Uterus.
6. Bladder beneath Peritoneum.
7. Broad Ligament.
8. Obliterated Umbilical Continuation of Hypogastric Artery.

41



42. SAGITTAL SECTION OF ADULT FEMALE PELVIS AND PELVIC VISCERA.

The **Vagina** passes with a slight sigmoid curve from above downwards and forwards, extending from the Uterus, the neck of which it surrounds, to the Vulva. Its Anterior Wall, 2½ inches in length, is in relation with the Bladder in its upper half, and with the Urethra below. The Posterior Wall, 3½ inches in length, is associated with the Rectum, being separated from it in its upper portion by the Pouch of Douglas, in its middle portion by the Recto-vaginal Septum alone, and in its lower portion by the Perineal Body.

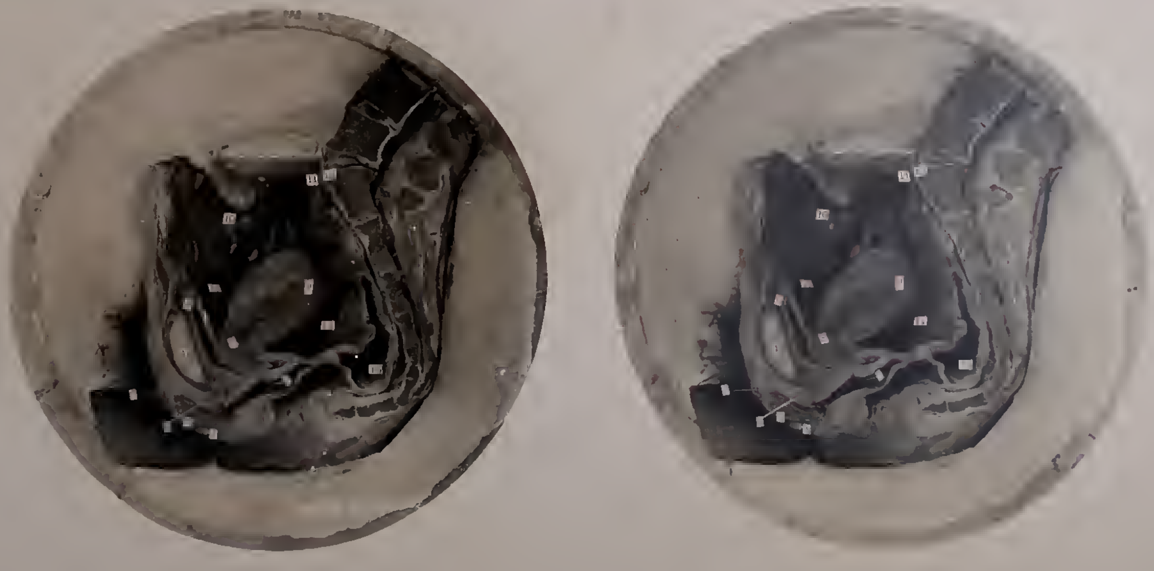
The long axis of the Vagina meets that of the Uterus at an angle which varies with the condition of the neighbouring Viscera. When the Bladder and Rectum are empty, as here depicted, the direction of the Vagina is parallel to the Pelvic Brim; when the Bladder is distended, the upper part of the Vagina is pushed nearer the Sacrum; if the Rectum is distended, the Vaginal Axis may be almost perpendicular.

With the Bladder and Rectum empty, the Uterus lies within the Pelvic Cavity in the normal position of anteversion, the Os Externum Uteri looking downwards and backwards, but in the preparation figured below the body of the Uterus is seen displaced backwards.

The figures indicate:—

1. Labium Majus.
2. Labium Minus.
3. Clitoris.
4. Symphysis Pubis.
5. Urethra.
6. Bladder.
7. Canal of Vagina.
8. Cervix Uteri.
9. Fundus Uteri displaced backwards.
10. Right Fallopian Tube.
11. Right Ovary.
12. Promontory of Sacrum.
13. Utero-vesical Pouch.
14. Utero-rectal Pouch (Pouch of Douglas).
15. Rectum.

42



43. SAGITTAL SECTION OF UTERUS

With Appendages of Right Side.

The Cavity of the Uterus is merely potential, as its anterior and posterior walls are in apposition with each other. The body of the Uterus has a covering of Peritoneum externally which passes off from the Bladder on to the Uterus at the Isthmus, the sphere of junction of the body and neck (5). The Muscular Wall of the Uterus is about half-an-inch thick, and consists of unstriped muscular fibres and fibrous tissue, while the Cavity is lined with mucous membrane covered with ciliated columnar epithelium.

The figures indicate:—

1. Anterior and Posterior Walls in apposition with line running downwards indicating Cavity of Uterus.
2. Fallopian Tube.
3. Ovary.
4. Round Ligament.
5. Peritoneum loosely attached at junction of Body and Neck of Uterus.
6. Vagina.

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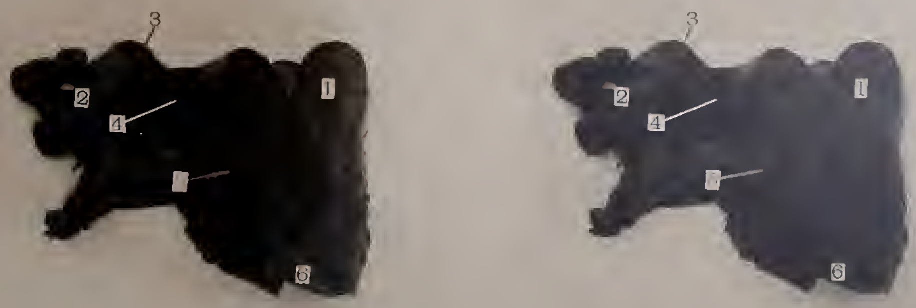


44. UTERUS WITH APPENDAGES.

(Posterior View.)

The Ovaries are two flattened, almond-shaped bodies attached to the posterior surface of the Broad Ligament of the Uterus. When in position in the Pelvis they are found at the level of the Pelvic Brim, each in a depression or Fossa Ovarica beside the Sacro-iliac Synchondrosis. Each gland is more or less vertical, the upper extremity being directed outwards and the lower inwards, and presents for examination two poles, two surfaces, and two borders. The upper more rounded pole (Tubal Pole) is attached to the fimbriated extremity of the Fallopian Tube by the Fimbria Ovarica, the lower more pointed is attached to the Uterus by a muscular cord, the Utero-Ovarian Ligament (6). The flattened surfaces are external and internal, the internal is directed more forwards and the external backwards. The borders are the posterior, convex and free, and the anterior (hilum), straighter and narrower, attached, by what is called the Mesovarium, to the posterior layer of the Broad Ligament.

The left Ovary (5) is in close relation with the large bowel.

The Fallopian Tubes or Oviducts, about 4½ inches in length, run outwards, one from each upper angle of the Uterus. Each is directed at first horizontally towards the Uterine Pole of the Ovary, and then passes upwards in relation to the inner side of the anterior border of the gland until it reaches the Tubal Pole, over which it arches backwards to descend along the posterior border of the Ovary. This portion of the Tube is expanded like a funnel, and is known as the Infundibulum (4), the margins of which are fimbriated. The Infundibular portion of the Tube opens into the Peritoneal Cavity by an aperture—the Ostium Abdominale. The part of the Tube continuous with the Infundibulum is called the Ampulla (3), the widest and longest portion of the duct and the most frequent site of a Tubal gestation. The horizontal portion of the Tube between the Ampulla and the Uterus is the Isthmus (2), and the last portion of the duct, the Pars Uterina or Interstitial portion, is embedded in the substance of the Uterine Wall, through which it opens into the Cavity of the Uterus.

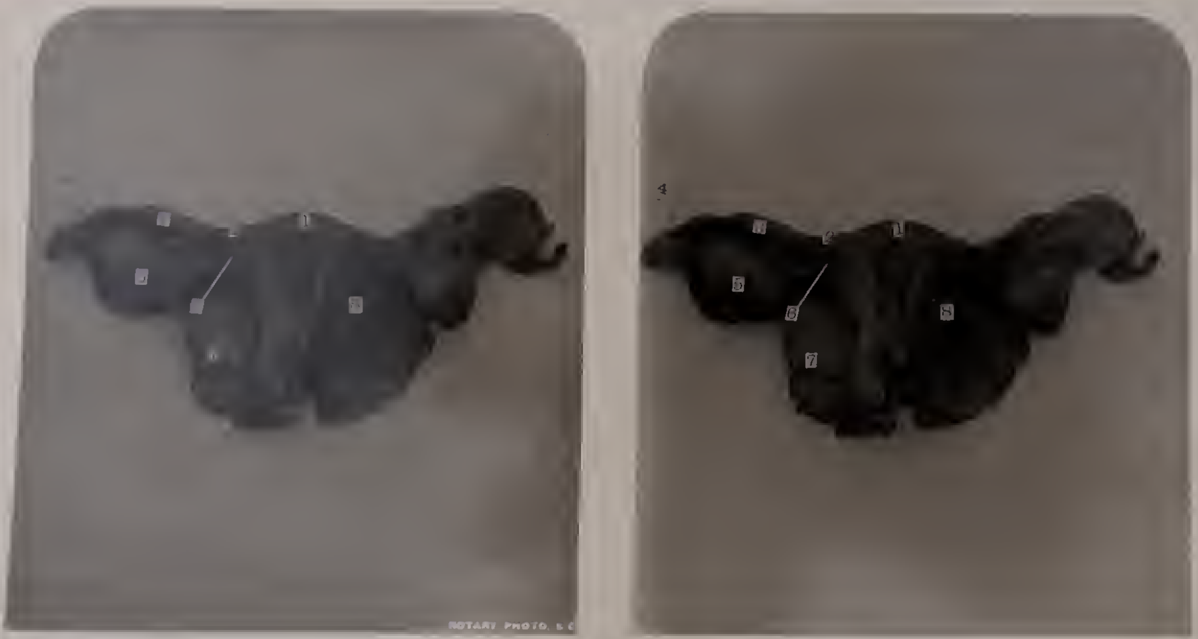
As the Fallopian Tubes lie in the upper margin of the Broad Ligament (7), they are wholly invested by a covering of Peritoneum, with the exception of a narrow strip on the inferior aspect which is in contact with the connective tissue between the two peritoneal layers of the Ligament.

These facts are of clinical importance in connection with Tubal Pregnancy; for if rupture of the Tube takes place upwards through the Peritoneum, hæmorrhage into the Peritoneal Cavity is practically unlimited, whereas if rupture takes place downwards into the connective tissue of the Broad Ligament, the hæmorrhage is more likely to be circumscribed.

The figures indicate :—

1. Fundus Uteri, with Cavity exposed from behind.
2. Isthmus of Fallopian Tube.
3. Commencement of Ampullary Portion of Tube.
4. Above Infundibulum or Fimbriated Extremity of Tube.
5. Ovary.
6. Utero-Ovarian Ligament.
7. Broad Ligament of Uterus.
8. Portion of Posterior Wall of Uterus deflected.

44



45. GRAVID UTERUS AT THE THIRD WEEK OF PREGNANCY.

(By kind permission of Professor Harvey Littlejohn.)

The muscular coat of the Uterus which is opened through the anterior wall shows increased thickness, due to hypertrophy and hyperplasy of the muscular fibres and increase of connective tissue.

The Embryonal Period begins with the third week, in the early part of which can be detected the beginning formation of the medullary groove and canal, soon to be followed by the appearance of the head-folds. At this stage of development the Abdominal Pedicle is seen coming off from the tail end of the Embryo, and lying almost in the same axis with it. The Embryo is concave on its dorsal surface, and is made up in great part of the Yolk-sac. A little later, the formation of the double heart may be noted; while in the latter part of the week the Cerebral and Optic Vesicles appear, as well as the Visceral Arches and Clefts. The Yolk-sac becomes more and more constricted, and is connected with the ventral surface of the Embryo by a Broad Pedicle. At the very end of the third week (about the twenty-first day) the limbs make their appearance as small buds upon the surface of the Embryo (Whitridge Williams).

In the right Ovary the Corpus Luteum is visible, while attached to the outer end of the right Fallopian Tube is a small Pediculated Cyst, the Hydatid of Morgagni.

The figures indicate:—

1. Embryo.
2. Corpus Luteum in Right Ovary.
3. Hydatid of Morgagni.

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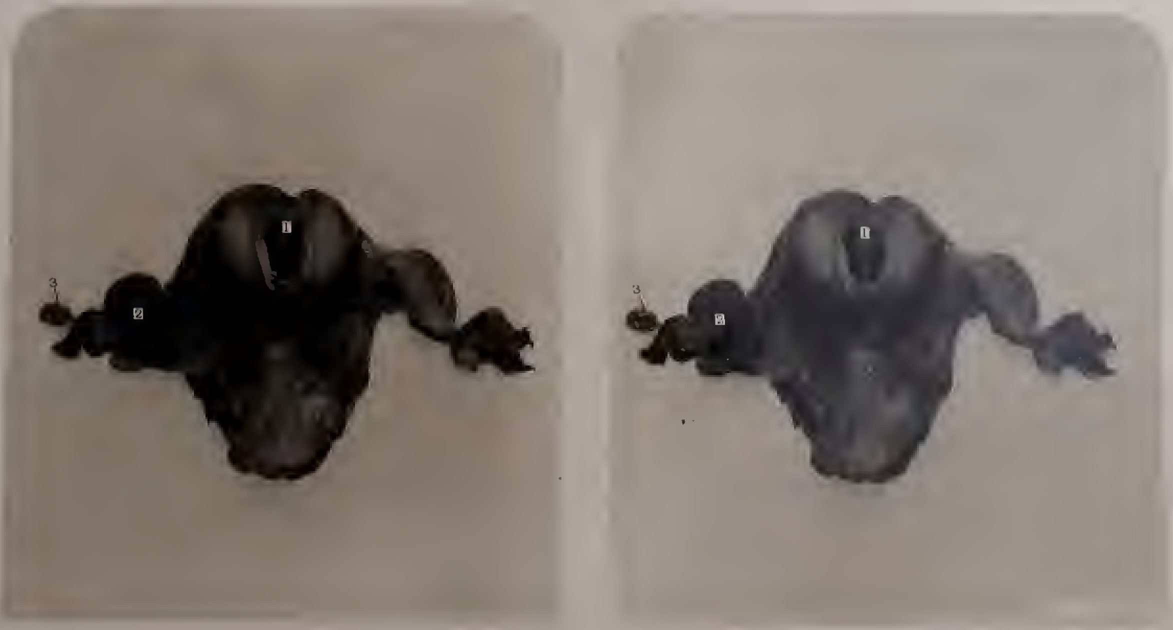

46. GRAVID UTERUS AT TWO AND A HALF MONTHS.

(By kind permission of Professor Harvey Littlejohn.)

In addition to the hypertrophy of the Uterine Wall (1), the Cervix Uteri (3) also shows some degree of hypertrophy, and owing to the increased secretion from the Cervical Glands, a large thick plug of mucus will be observed blocking the Cervical Canal.

The Placenta (2) is seen attached to the Posterior Wall of the Uterus, with the Umbilical Cord passing towards the Embryo seen in section in the upper part of the cavity. The Embryo is approximately 7 cm. in length at this stage of pregnancy.

The figures indicate :—

1. Uterine Wall.
2. Placenta with Umbilical Cord attached.
3. Cervix with Mucous Plug *in situ.*

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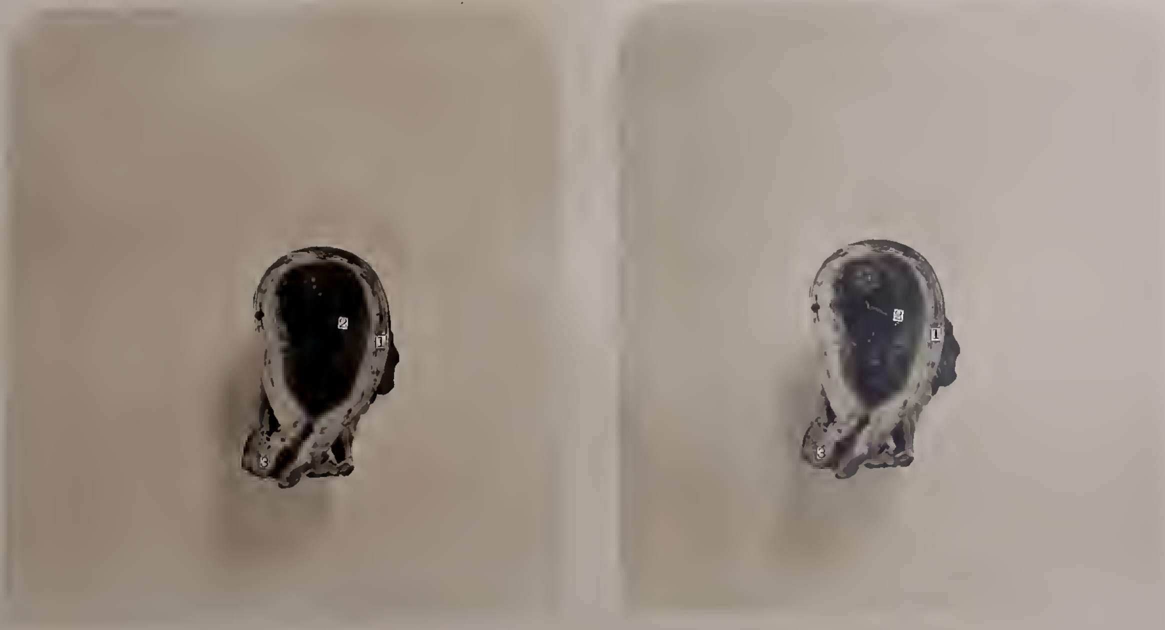

47. GRAVID UTERUS AT THE THIRD MONTH OF PREGNANCY.

At this stage of Pregnancy the Uterine contents have attained the size of a goose's egg, and the Embryo is approximately 9 cm. in length and 24 grms. in weight. The Anterior Wall of the Uterus is opened into and the Decidua (5) reflected, so as to expose the Cavity of the Uterus with its contents.

The figures indicate:—

1. Placenta with Umbilical Cord running just below the 1 to the Abdomen of the Fœtus which lies to the right.
2. Fallopian Tubes.
3. Ovaries.
4. Round Ligaments of Uterus.
5. Decidua reflected.

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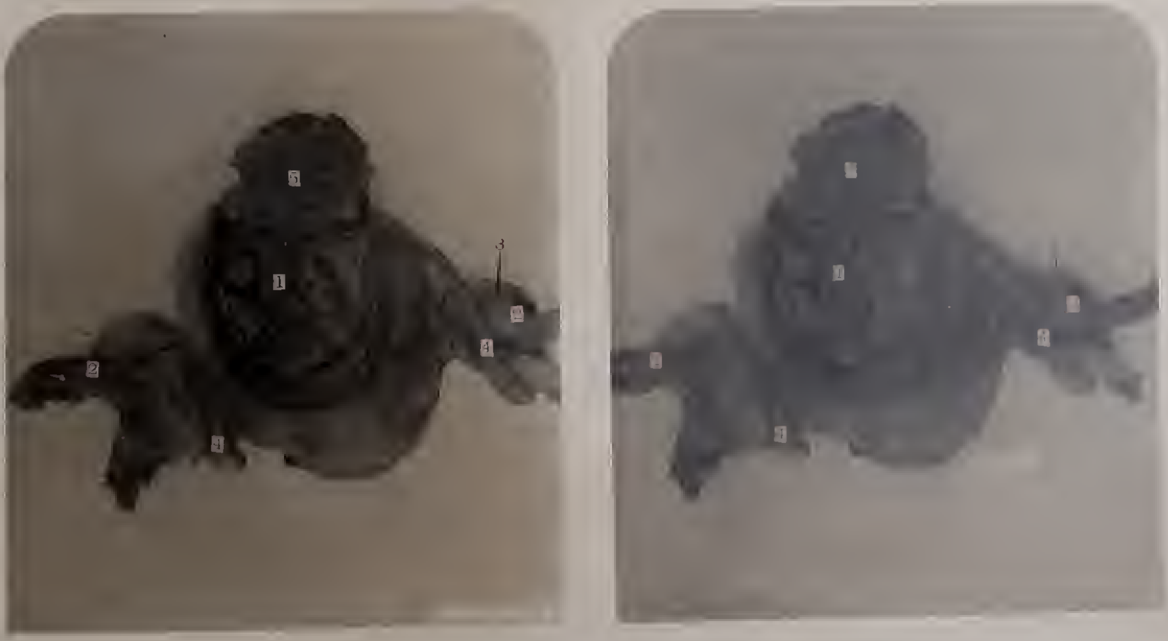

48. GRAVID UTERUS AT THE FOURTH MONTH OF PREGNANCY.

(By kind permission of Professor Harvey Littlejohn.)

At this stage of Pregnancy the Uterus rises out of the Pelvic Cavity to become an Abdominal Organ.

The Embryo is 17 cm. in length and 120 grms. in weight.

The Uterus has been opened through the anterior wall so as to expose the Ovum with the Placenta attached high up.

The figures indicate:—

1. Placenta.
2. Embryonic Sac.
3. Cervix with Mucous Plug *in situ.*
4. Vagina.
5. Corpus Luteum in Ovary.

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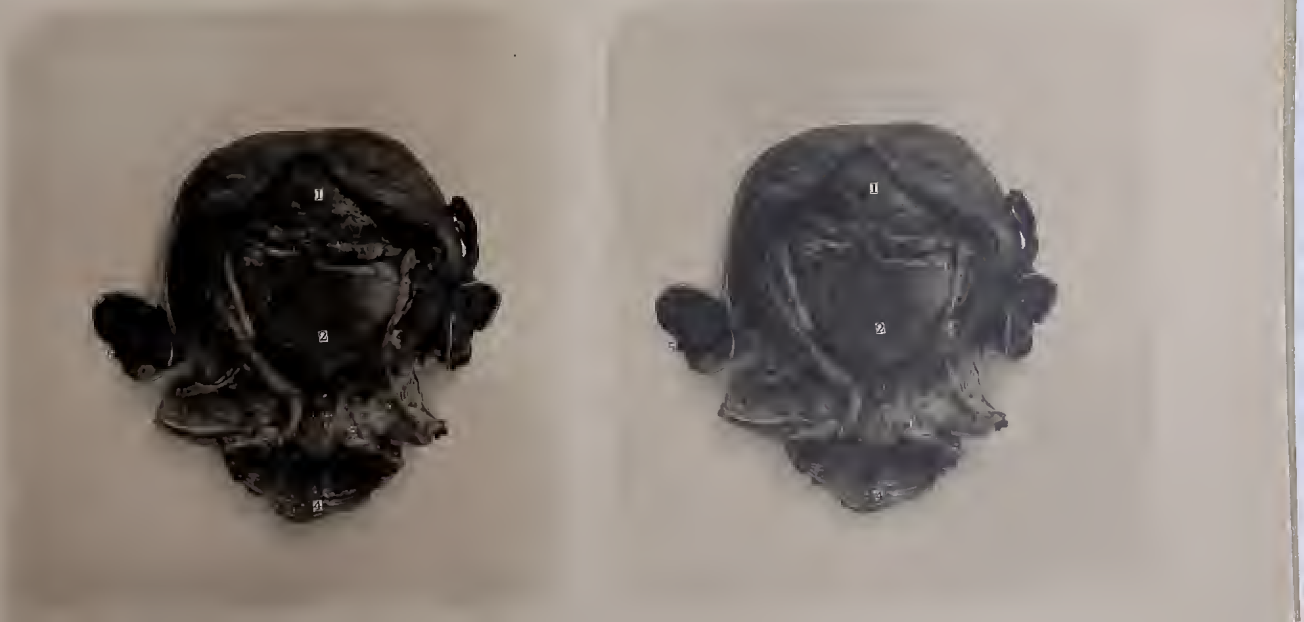

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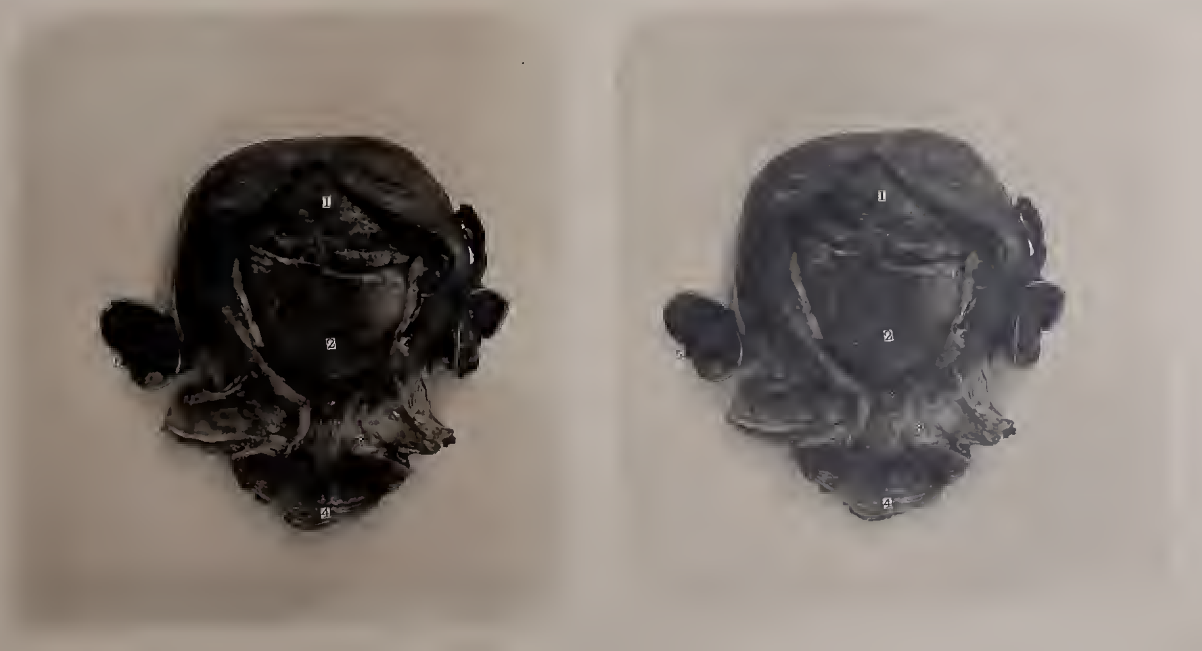

49. GRAVID UTERUS—EIGHT MONTHS.

(Anterior View.)

The Gravid Uterus increases in size, so that by the eighth month it is about 8 inches in length, as compared with 3 inches in the virginal state. The increase is almost entirely limited to the body, the Cervix remaining practically unchanged until the onset of labour, and is due not to a mere distension of the walls from the growth of the enlarging ovum, but to a definite development of all the tissues in the Uterine Parietes, so that the muscular fibres, *e.g.*, increase from 2 to 7 times in width and 7 to 11 times in length, in addition to the formation of new muscular fibres during the early months of pregnancy. These fibres are subject to rhythmic contractions, when the Uterus feels firm; in the intervals the walls are flaccid and permit of palpation of the Fœtus and its parts. The veins, more especially corresponding to the placental site, become widened, so as to appear in section like sinuses in the walls; the enlarging arteries keep up the tortuosity characteristic of the Uterine Artery in the Broad Ligament and its branches. The walls appear thinned when the blood-vessels are emptied.

As the body of the Uterus becomes larger the physiological anteflexion is increased, that is, the angle between the body and the Cervix becomes more acute, as may be seen in the Stereogram.

To the right a small well-defined Subperitoneal Fibroid Tumour may be observed.

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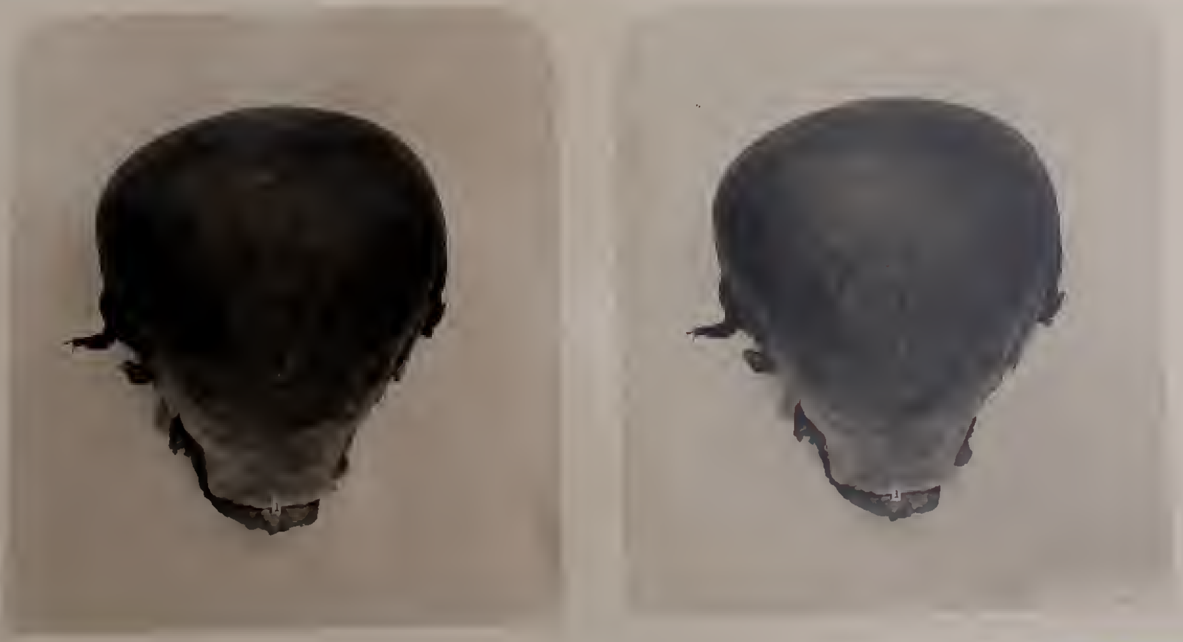

50. GRAVID UTERUS AT THE EIGHTH MONTH OF PREGNANCY

Showing Attitude, Presentation, and Position of the Fœtus.

(By kind permission of Professor Harvey Littlejohn.)

The Attitude or Habit or Disposition of the Fœtus during intra-uterine life is the relation which the parts of the Fœtus bear to each other. Normally the Fœtus is disposed so as to be compacted into an ovoid body. The attitude is one of flexion, the back being convex, the head bent on the chest, the arms folded across the thorax, and the thighs and legs flexed on the abdomen. This state is assumed about the fifth week of intra-uterine life, and is persistent in varying degree throughout antenatal life. It is largely due to the action of the Flexor Muscles, and serves to adapt the Fœtus to the ovoid shape of the Uterus.

The Presentation or Lie of the Fœtus indicates the relation of the long axis of the Fœtus to the long axis of the Uterus, the part of the Fœtus, usually the head, showing itself first at the Os, in the Vagina, or at the Vulva, being known as the *presenting part.*

The Position of the Fœtus is the relation of the back of the presenting part to the Pelvis of the mother, whether to the right or left side of the mother, and anterior or posterior. In the Stereograph view the Fœtus will be observed in the Attitude of Flexion with Head Presentation and Right Occipito-posterior Position.

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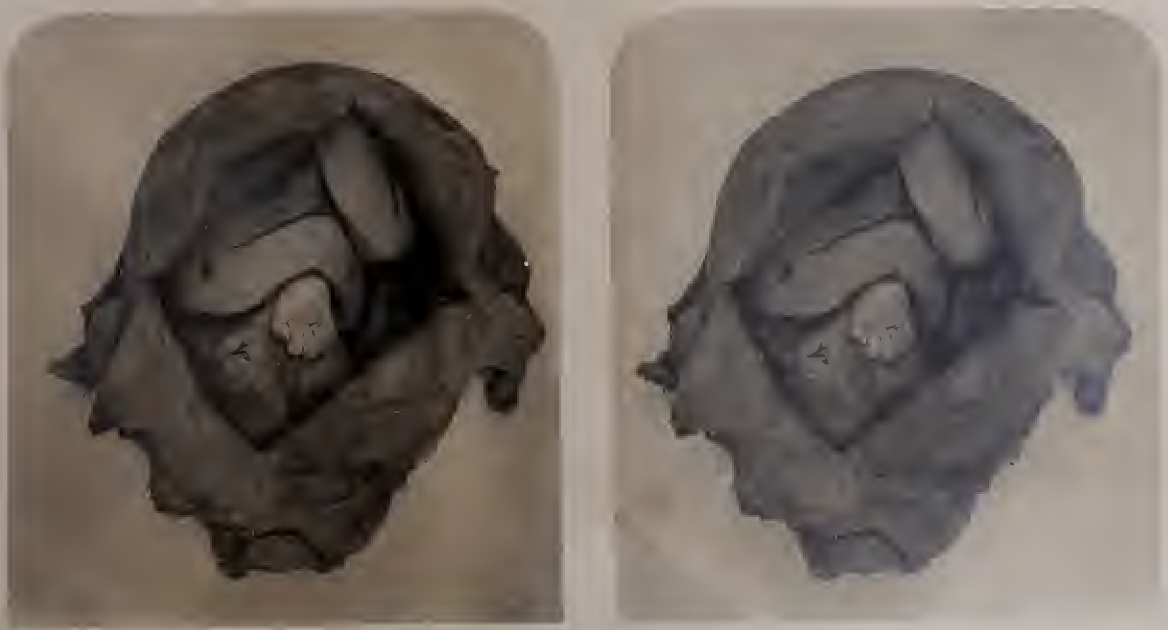

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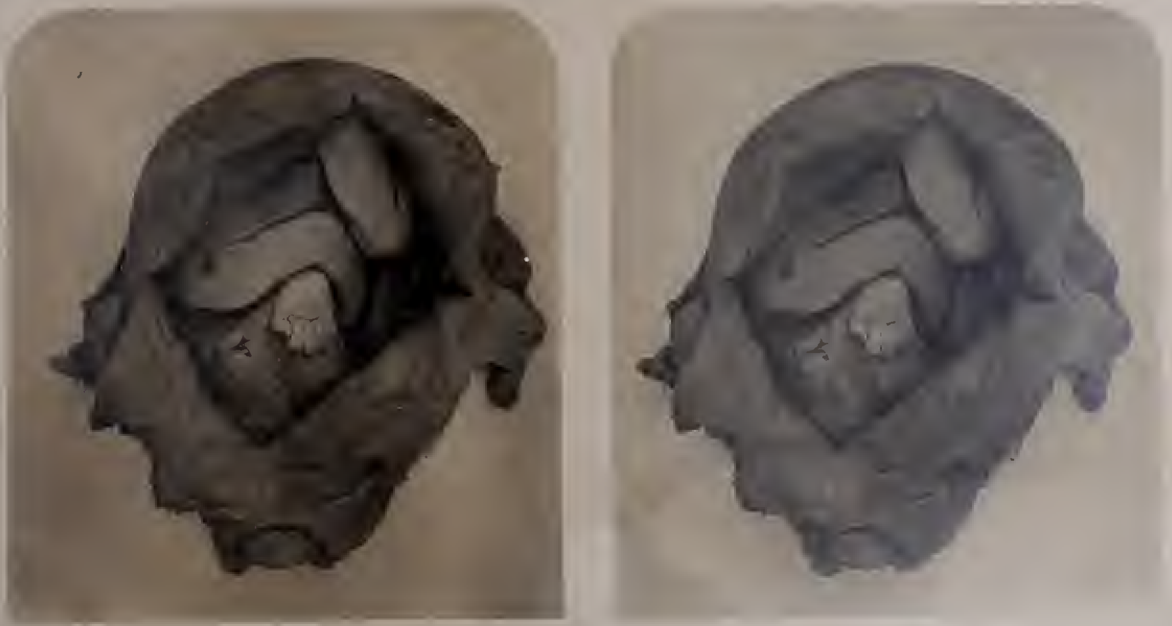

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